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Feinstein

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(54) **VIEW NAVIGATION AND MAGNIFICATION
OF A HAND-HELD DEVICE WITH A
DISPLAY**

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(57) **ABSTRACT**

System and method for view navigation and magnification
of the display of hand-held devices in response to the
orientation changes along only two axes of rotation as
measured by sensors inside the devices. The view navigation
system is engaged and controlled by a single hand which
simultaneously presses two ergonomically designed
switches on both sides of the hand-held device. In other
embodiments, the system engaged into the view navigation
mode in response to an operator command in the form of a
finger tap, or a voice command, or predefined user gestures.
The response curve of the view navigation to sensed changes
in orientation is dynamically changing to allow coarse and
fine navigation of the view. Various methods are described
to terminate the view navigation mode and fix the display at
the desired view. Miniature sensors like accelerometers, tilt
sensors, or magneto-resistive direction sensors sense the
orientation changes. The system can be added to an existing
hand-held device via an application interface of the device.

36 Claims, 14 Drawing Sheets

